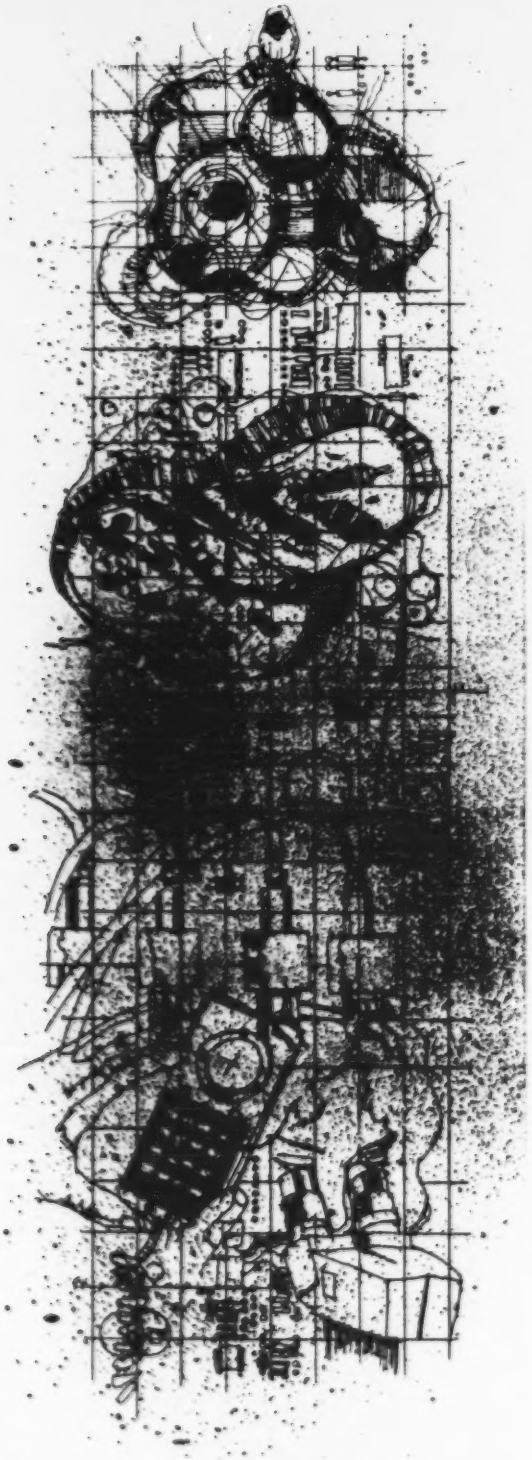
Alberta Technology, Research and Telecommunications



ANNUAL
REPORT
1986-87

Alberta
TECHNOLOGY, RESEARCH
AND TELECOMMUNICATIONS

Office of the Minister

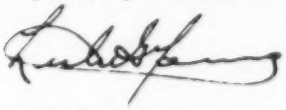
404 Legislature Building, Edmonton, Alberta, Canada T5K 2B6 403/422-5982

The Honourable Dr. David J. Carter
Speaker of the Legislative Assembly of Alberta
325 Legislature Building
Edmonton, Alberta
T5K 2B6

Dear Sir:

I have the honour to submit the Annual Report for the Department of Technology, Research and Telecommunications for the year ending March 31, 1987.

Respectfully submitted,



Leslie G. Young
Minister

Alberta
TECHNOLOGY, RESEARCH
AND TELECOMMUNICATIONS

Office of the Deputy Minister

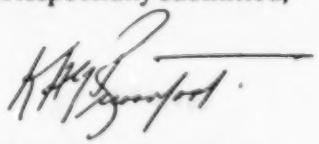
12th Floor, Pacific Plaza, 10909 Jasper Avenue, Edmonton, Alberta T5J 3M8 403/422-0567

The Honourable Leslie G. Young
Minister of Technology, Research and Telecommunications
404 Legislature Building
Edmonton, Alberta
T5K 2B6

Dear Mr. Young:

I have the honour to submit a report covering activities of the Department of Technology, Research and Telecommunications for the fiscal year ending March 31, 1987.

Respectfully submitted,



Ken H. G. Broadfoot
Deputy Minister

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Message from the Minister

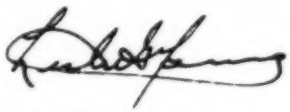
Into the Twenty-First Century

Challenge and change are the two words which characterize Alberta as we move into the 21st century. Our province's economic success in a world trading environment will become increasingly dependent on our ability to develop and commercialize new technologies while at the same time applying advanced technology to existing industries to improve productivity.

Advancing technology represents a significant growth opportunity for Alberta. We have a number of unique strengths on which to capitalize. Alberta has a vital and active scientific and research community. We have well over 100 world-class scientists. We have developed strong and highly respected universities. Our skilled and committed work force includes a large pool of engineering and technical professionals.

Fostering advanced technology research, development and commercialization is a primary goal of Alberta's entrepreneurs, scientists and government. Together we are actively searching for new opportunities to expand our economic base.

Although there have been rapid advances in certain sectors of advanced technology in Alberta, there are a number of areas still in the development stage. It is important that Albertans gain a better awareness and understanding of the benefits of advanced technologies. We should be proud of what Alberta entrepreneurs have accomplished. The vigour and vitality of our economic system and of our entrepreneurs and scientists will ensure future achievements. The challenge and the change of advanced technology remain as guideposts to the 21st century.



Leslie G. Young
Minister

The Department

A Sense of Purpose

On February 6, 1986, Premier Don Getty announced the establishment of the Department of Technology, Research and Telecommunications as part of an overall thrust and renewed commitment to diversify the Alberta economy.

Alberta's advanced technology strategy is to create an environment in which technology can flourish - an environment in which new inventors and innovators can create new products or new ways of doing things - an environment in which individuals and organizations will be able to develop, produce and market their technological ideas.

The cornerstones of this strategy, for many years, have been the province's universities, colleges and institutes, the Alberta Research Council, and more recently, the Alberta Heritage Foundation for Medical Research. These institutions will continue to be the foundation of Alberta's advance into the 21st century.

In addition, the provincial government has been strategically positioning a number of "building blocks" to support and encourage the growth of advanced technology in Alberta:

The Alberta Microelectronic Centre, the Electronics Industry Information System, the Electronics Test Centre, the Alberta LASER Institute, the Biotechnology Pilot Plant, the Alberta Supercomputer Project, the Centre for Frontier Engineering Research and the Alberta Telecommunications Research Centre.

Development of Alberta's telecommunications and communications public policy also falls under the jurisdiction of the Department. Alberta has one of the most sophisticated telecommunications systems in the world and provides one of the highest levels of service available anywhere at rates among the lowest in the country.

In addition to the telecommunications system, Alberta has a well-developed broadcasting and cable system which is actively supported by Alberta Government public policy.

The Government also supports the provision of educational broadcasting services operated by ACCESS Network which provides radio and television programming.

Mission Statement

The Department will promote the research, development and commercialization of science and technology, the application of new technology to existing and new industries, and the creation of new employment opportunities arising out of technology development within Alberta. It will assure that public policy supports a high quality affordable communications system for all Albertans, and work to create an awareness and understanding among Albertans of the economic, social and environmental benefits of advanced technologies.

The Minister is responsible to the legislature for:

- Alberta Research Council;
- Alberta Government Telephones;
- Alberta Educational Communications Corporation (ACCESS Network);
- Alberta Heritage Foundation for Medical Research;

and liaises with:

- Alberta Oil Sands Technology and Research Authority;
- Alberta Oil Sands Environmental Research Program;
- Alberta Environmental Centre;
- Agricultural Research Council of Alberta;
- Alberta Foundation for Nursing Research; and
- other provincial organizations undertaking research in the engineering, medical and natural sciences fields.

Department Goals

Helping to Secure the Future

The goals of the Department are:

- to identify the priority advanced technology areas that will contribute to the growth and diversification of the Alberta economy;

- to direct funds/resources for research, development and commercialization in those priority areas;

- to ensure that resources available for technology development are applied in order to create favourable conditions for growth;

- to ensure that technology is commercialized successfully to maximize employment opportunities in Alberta and to enhance the competitive position of Alberta entrepreneurs;

- to establish a technology culture within the province which prompts broad participation by Albertans in the research, development, commercialization and utilization of advanced technologies; and,

- to develop provincial policies and influence federal policies to ensure a high-quality affordable communications system for all Albertans.

Creating the Environment for Growth

The broad strategies of the Department include:

- developing "home grown" technology-intensive companies through the provision of start-up assistance, management and marketing support;

- identifying and establishing a "building block" infrastructure which will bridge the research interests of business, research institutions and universities;

- stimulating the commercialization of research and development through co-operative arrangements and programs applicable to business, universities, the general public and government laboratories;

- streamlining access to government programs aimed at enhancing the commercialization of science and technology;

- working closely with the federal government in science and technology areas with particular emphasis devoted to garnering a larger share of federal science and technology expenditures, including: program areas, procurement expenditures and research facilities;

- improving the availablity of risk capital;

- attracting investment by international technology companies that will result in the transfer of technology to Alberta in our priority development areas;

- establishing a communications program which utilizes all available resources to build public understanding of Alberta's technology development opportunities and scientific achievements.

Technology Commercialization Division

The Department has identified a number of advanced technology sectors in which Alberta may be competitive on a worldwide basis. The Technology Commercialization Division is responsible for promoting these specific areas and assisting Alberta companies in developing new and innovative products which have local and international market potential.

The Division coordinates and administers a $2.5 million **Commercialization of Technology Program** which provides financial assistance to private sector requests for the support of institutes, development of new products, the commercialization of research and for feasibility studies.

The program's objectives are consistent with the Government's economic development and diversification goals. Support is provided in the form of grants, shared cost grants or investments in:

- Industry/University related centres for research and development.
- Institutional research through shared projects with industry.
- Innovation assistance.
- Feasibility and opportunity studies.

The program assisted 12 organizations with a total expenditure of over $600,000 for the fiscal year.

The Division also assists Alberta's three major universities, other research facilities and private individuals in bringing their products to the marketplace.

Staff in this Division specialize in the following key sectors:

Electronics/ Microelectronics

Medical and Biological Sciences

Telecommunications

Computing/Software

Technology Transfer

Advanced Materials and Processes

Advanced Manufacturing

Reports from each area follow:

Electronics/Microelectronics Section

The Electronics/Microelectronics Section is responsible for assisting Alberta's electronics industry in developing new products and incorporating new technologies in electronics and microelectronics products. The industry is well supported by Alberta's advanced technology infrastructure which includes "building block" facilities such as the Electronics Test Centre, the Alberta Microelectronic Centre and the Electronic Industry Information System.

Highlights

- Established a close working arrangement with the Electronics Industry Association of Alberta in order to understand the needs of the industry.
- Worked closely with the Electronic Industry Information System in forming an advisory committee to advise management of the direction the System should take.
- Represented the Department as a member of the Electronics Test Centre Management Committee.
- Assisted the Alberta Microelectronic Centre in strategy and business planning sessions.
- Assisted with a number of private sector proposals for government assistance in the development of new products.
- Investigated the use of surface mount technology which led to a surface mount seminar held by an Alberta company.

Medical and Biological Sciences Section

The Medical and Biological Sciences Section assists the development and commercialization of technologies that generate human health care products (drugs, vaccines, diagnostic agents) and agents used in new products in chemicals, waste treatment, food processing and agriculture. Biotechnology is a major stream of technology development within biomedical sciences.

Highlights

- Initiated the introduction of an investment firm to an animal biotechnology company which resulted in the formation of a new company and the injection of $6 million of capital.
- Provided a loan guarantee to support the future establishment of a biological pesticide manufacturing plant in the province.
- Arranged the selection and meeting of the Biotechnology Advisory Committee and reported on the findings and recommendations.
- Provided information and counsel to the Alberta Government committee on compulsory licensing of drugs. Attended the Senate Committee hearings on Bill C-22 and responded to questions dealing with the issue.
- Met with presidents and CEOs of multinational pharmaceutical companies. This generated strong interest in Alberta resulting in invitations from each company to meet at its home office to discuss a company mission to Alberta.
- Assisted with a number of private sector proposals for government assistance in the development of new products and processes.

Telecommunications Section

One of Alberta's technological strengths, due to its vast and varied geography, is its efficient and economical telecommunications system and its internationally recognized industry. Alberta based telecommunications companies produce world-class products which compete on an international scale. This section assists companies develop telecommunications technology and products in the areas of voice, data, video, cellular radio, supervisory control and data acquisition (SCADA), avionics, and satellite communication equipment.

Highlights

- Worked closely with the Alberta Telecommunications Research Centre in structuring the organization, establishing funding and project programming, and assisted in attracting additional industrial sponsors.

- Established contacts with the Department of Communications, Department of Regional Industrial Expansion, External Affairs and the Department of National Defence with a view to exploring synergistic research areas and facilities which could be located in Alberta.

- Worked closely with the Southern Alberta Institute of Technology (SAIT) and External Affairs to define the feasibility of the establishment of an International Telecommunications Training Centre in Alberta.

- Assisted with a number of private sector proposals for government assistance in the development of new products and processes.

Computing/Software Section

The Department recognizes the computing/software sector as a key element in the development of advanced technology in Alberta. It is associated with all sectors identified as contributing to Alberta's technological strengths. This section keeps abreast of developments in basic microcomputers, sophisticated supercomputers and the development of corresponding software. It is also concerned with other related applications, such as artificial intelligence, robotics, expert systems, computer-aided design and manufacturing and numerical control systems.

Highlights

- Represented the Department in the administration and monitoring of the Supercomputer facility located at the University of Calgary.
- Participated in proposal review and final documentation for departmental funding in the areas of software development, parallel processing and expert systems.
- Acted as a steering member on several interdepartmental committees including the National Software Working Committee - Ottawa.
- Organized assistance, including financial support, to several sector related symposiums, conferences and workshops, including Financial Symposium for Emerging Companies, and Laserdisc Conference.
- Developed new contacts and closer working relationships with federal government counterparts in the Department of Regional Industrial Expansion, the Ministry of State for Science and Technology, Department of Communications, External Affairs, and the National Research Council, to better understand their priorities, programs and policies, and provide an Alberta perspective to the national computing/software industry.

- Continued liaison with, and support for, sector associations including Software Developers Association, Canadian Information Processing Society, Data Processing Management Association and the Alberta, Edmonton and Calgary Advanced Technology Associations.

- Assisted with a number of private sector proposals for government assistance in the development of new products and processes.

Technology Transfer Section

Technology Transfer finds ways to commercialize inventions, technology know-how and technical information generated by agencies funded by the provincial government or private individuals. This section is also involved in importing technology inventions for use by Alberta's industries.

Highlights

- Provided funding ($150,000 each) for the offices of technology transfer at the University of Alberta and the University of Calgary.
- Sponsored technology transfer seminars/conferences/courses at the universities. For example, a workshop on transferring university technologies to the private sector, which featured Dr. P. Abetti of the Renselaer Polytechnic Institute, New York, was held in Calgary and Edmonton.
- Encouraged the formation of spin-off ventures based on university technologies. An example is financial assistance to a university spin-off company producing synthetic odours for the control of pests which damage trees and orchards.
- Initiated steps required for transferring technologies developed by the provincial government to Alberta industry. This section negotiated with several parties for the licensing of a catonic polyelectrolyte which could be used as an industrial flocculant and for other scientific, chemical and agricultural applications.
- Assisted numerous individual inventors in commercializing their technologies.
- Researched and produced "Research For Sale", an Alberta directory of university research labs and other research facilities which perform testing and research projects for private industry.

Advanced Materials and Processes Section

This section was established in October 1986 to help ensure Alberta industries develop and apply emerging advanced materials and new methods of processing materials technologies in order to remain competitive. Advanced materials and processes includes advanced ceramics, high performance polymers, advanced composites and specialty metals used in a variety of industries.

Highlights

- Formed focus groups in Edmonton and Calgary on advanced materials in consultation with various Alberta institutional groups, such as the Alberta Research Council, the Centre for Frontier Engineering Research and the Alberta LASER Institute, to provide input for developing advanced materials opportunities for Alberta companies.

- Organized seminars to provide information on the Federal Government's EUREKA (a European program)/Technology Opportunities in Europe Program (TOEP) initiative. The seminars encouraged Alberta companies to set up joint venture research projects with European companies, and to apply for funding assistance to carry out applied research in Alberta.

- Organized and led an Alberta EUREKA/TOEP mission to Europe with six Alberta high technology companies seeking European applied research partnerships.

- Identified a materials processing project for the on-site refurbishment of railway lines, using high powered laser technology, as a potential project for the Alberta LASER Institute.

- Established contact between the National Defence Research Establishment, Suffield (DRES) and Alberta high technology companies seeking federal research contracts.

- Worked with twelve new companies seeking to further develop advanced materials and processes in Alberta.

Advanced Manufacturing Section

The Advanced Manufacturing Section concentrates its efforts on enhancing productivity and competitiveness of Alberta's existing manufacturing industries by the application of automated processes. It provides assistance and advice to Alberta's manufacturers in matters pertaining to the use of advanced manufacturing technologies such as computer-aided design, computer-aided manufacturing and the use of robotics for the production of small to sophisticated large scale products.

Highlights

- Completed a study, in co-operation with the Alberta Research Council, to determine the needs of Alberta industry relative to advanced manufacturing and product development technologies.
- Secured Government funding of $2 million each for multi-tenant research facilities in Edmonton and Calgary research parks.
- Assisted in the growth and development of a small business incubator facility in Calgary.
- Provided financial support to an inspection services company to work with the Alberta LASER Institute in the development of a laser thread inspection device.
- Completed an initial survey of Alberta tool and die manufacturing capabilities.
- Worked with the Canadian Manufacturers' Association, Society of Manufacturing Engineers, and others in the development and delivery of support services to Alberta manufacturers.
- Assisted numerous manufacturing companies in developing business plans.

Planning and Coordination Division

The Planning and Coordination Division has several areas of responsibility. It provides research, advice and coordination in the ongoing development and administration of Alberta Government policy in both communications and science and technology.

The Division is responsible for long-term planning within the Department and assisting in the development of specific sectoral plans for advanced technology industries. It also provides technical, economic, financial and policy advice to support Departmental programs and other initiatives.

In addition, the Planning and Coordination Division provides support to the Minister related to his responsibilities for the administration of the Alberta Research Council Act, Alberta Heritage Foundation for Medical Research Act, and Alberta Educational Communications Corporation Act, Alberta Government Telephones Act and other telecommunications statutes.

The Division has administrative responsibility for the delivery of two Departmental programs, the Alberta-Heilongjiang Science and Technology Exchange Program and the Satellite Dish Grant Program.

Highlights

- The Department played an influential role in drafting national science policy leading to the signing of the National Science and Technology Policy in Vancouver on March 12, 1987.
- The Technology and Research Advisory Committee was created July 14, 1986, to advise the Minister on science policy matters and related issues. The Committee members represent nine departments and agencies. It is chaired by the President of the Alberta Research Council.
- Negotiations continued, with the Federal Ministry of State for Science and Technology, towards more federal support to Alberta science and technology projects.
- Assisted an Alberta company and a group of its potential customers in organizing an eastern European technology licensing mission. Development of the technology to western standards is proceeding to the commercialization stage.
- Concluded the contract between the Organization for Economic Co-operation and Development, and the four western Canadian provinces, for a study of technological innovation. The report was issued informally in March 1987.
- On a cost shared basis with the City of Edmonton, provided financial support to the AGT/et Arbitration Committee set-up to determine a fair and equitable toll revenue sharing formula between AGT and edmonton telephones. The committee issued its decision on February 28, 1987.

- Over the past year the Division has participated in a series of federal and provincial meetings working towards the development of a national telecommunications policy. A meeting of Ministers of Communications was held in Vancouver on June 9, 1986, where Ministers agreed on six principles to guide the development of a national telecommunications policy and further focussed attention on specific agreements in telecommunications policy.

- With the federal government and other provincial governments, the Division has jointly commissioned, sponsored or participated in the following studies:

  The Impact of International Competition on the Canadian Telecommunications Industry and its user (Released August 1986).

  Federal/Provincial Examination of Telecommunications Pricing and the Universal Availablility of Affordable Telephone Service (Released October 1986).

  The Impact of Telecommunications on Regional Economic Development (Currently underway).

- Work was carried out with the office of the Alberta Trade Representative in preparation of Alberta's involvement in the Canada/U.S. bilateral trade negotiations. Specific areas of concentration for this Department have been in advanced technology, communications industries and intellectual property.

- Increased emphasis has been placed on distance education, educational software and telematics (i.e. integration of computer and communication technology) which are becoming increasingly important as a means of ensuring more efficient delivery and improved access to information services. In addition, the development and application of these new technologies are emerging as areas providing potential commercial and other opportunities to Alberta businesses and institutions.

- Division personnel have been involved with a number of ongoing pilot projects related to the application of communications and computer technology. These have included the use of satellites for data transmission, the use of cable television to provide courses and the integration of computer and communications technology in a project on the classroom of the future. Preliminary work is also underway on how these new technologies can be used by libraries, educational and other institutions to improve the delivery of their services.

- Considerable attention has been given over the past year to coordinating Alberta's involvement in the Canada Space Program and in the Radarsat project in particular. Radarsat is a Canadian led international joint program to design, construct and operate Canada's first earth observation satellite system.

- The Department has been active in providing policy advice on new federal government and industry initiatives in the field of broadcasting and cable television. Special attention has been given to the Federal Task Force Report on Broadcasting Policy and on the potential impact of these recommendations on Alberta.

- The Department began work on the design and development of a data base designed to provide pertinent and needed information on Alberta's advanced technology industrial base. This project, which is being done in conjunction with a consulting firm and the private sector, is scheduled for completion in the latter part of 1987.

- During the reporting period, the Department assumed responsibility from Alberta Advanced Education for the publication of data pertaining to science and technology initiatives in the Province, which is done in cooperation with Statistics Canada.

- During the course of this year, the Department implemented the Science and Technology Exchange Program between Alberta and our sister Province of Heilongjiang, People's Republic of China. The Program is designed to enable the Province of Heilongjiang to place up to ten of its scientific and research personnel in Alberta Government research organizations for a period of up to one year. In turn, Heilongjiang will place up to ten Alberta scientific and research personnel in its research organizations for a term of up to one year. During this reporting period, the program sponsored ten Chinese and eight Alberta personnel.

- This review period marked the third and final year of the Satellite Dish Grant Program. It was designed to assist non-profit public agencies and educational institutions in receiving the ACCESS Network satellite programming services by providing a capital grant of $500 to offset the costs of purchasing and installing satellite receiving equipment. During the operational life of the Program, 176 grants were provided.

Financial Projects and Administration Division

Financial Projects and Administration provides central support and financial advisory services to the Department as follows:

- Finance, including accounts processing, budget preparation and analysis, and financial control processes.

- Systems and Information Services, including planning and standards, and provision of project management expertise to line areas.

- Financial Projects provides analytical support, project appraisal and advice to the Department and Minister on financial aspects of projects sponsored by Technology, Research and Telecommunications.

- General administration, including mail services and records management.

The Finance and Administration Division establishes and maintains accounting records and procedures for the Department to ensure adequate financial control.

It prepares the annual Departmental budget and monitors expenditures throughout the fiscal year and monitors contracts with the private sector entered into by the Department.

The Systems and Information Services Unit provides office automation, telecommunications and EDP support to the Department. Word processing, electronic messaging and special applications software is available to users from terminals on most desks in the Department, including the office of the Minister. Data-voice integration allows users to share information with remote terminals.

The main Departmental system is Northern Telecom's Meridian DV-1, which uses advanced integrated data-voice technology. During 1986/87, Departmental Meridian systems grew from a single, 10-terminal DV-1, to two separate DV-1's with a total of 39 terminals.

In 1986/87, the Department participated in a Beta test of the latest DV-1 hardware and software. In future years, this commitment to the latest available computer and telecommunications technologies will continue.

During the fiscal year, the Financial Projects Unit provided analytical support, project appraisal and advice to satisfy the financial needs of Alberta businesses.

The Financial Projects Unit carried out the detailed negotiations required to put in place approved guarantees, investments, and research and development incentives.

Communications were maintained with other departments in connection with the provision of research and development grants and guarantees. Liaison was maintained with private lending institutions and the financial community to keep abreast of developments which may be of benefit to those Alberta businesses which may require financing.

Highlights

- During the 1986-87 fiscal year, efforts were concentrated on the set-up of the Department. Departmental procedures were established and implemented for accounts processing and financial control processes.

- During the reporting period, the Financial Projects Unit negotiated the terms and conditions of grants, preferred share purchases, loan guarantees, and equity investments including:

- A grant to assist the Alberta Telecommunications Research Centre to provide a research facility for joint research and education in the field of telecommunications.

- A preferred share purchase and conversion of an existing debenture into common shares to enable General Systems Research Inc. to commercialize its laser cutting and aeronautics technologies.

- Preferred share purchases to assist Teknica Resource Development Ltd. in the development of a fourth generation geophysical/geological interpretation system and D & S Knowledge Systems Inc. to further develop and market an expert computer software system for log analysis.

- Grants to the Edmonton and Calgary Research and Development Park Authorities.

- A Preferred share purchase to Alta Genetics Inc. to conduct research, develop and market livestock embryo transfer technology.

- A loan to enable Dial-Guard Ltd. to complete the redesign of its computer system security device and begin commercial manufacturing in Alberta.

- An equity investment and loan guarantee to Tomotechnology Inc. to assist in the development of a non-destructive core analysis process.

Financial Statement

Budget Estimates, Special Warrants, and Expenditures Classified by Vote and Element

Vote 1	Development of Science and Technology	1986-87 Budget Estimates	Special Warrants	Fund Transfers	Expenditures for the Year Ending March 31, 1987 (unaudited)
1.0.1	Minister's Office	$ 403,848	—	(15,000)	$ 226,737
1.0.2	Deputy Minister's Office	195,162	—	(500)	183,363
1.0.3	Financial and Administrative Services	3,256,177	—	304,600	1,583,920
1.0.4	Research, Planning and Coordination	1,826,332	—	(261,500)	1,489,813
1.0.5	Technology Commercialization	1,059,150	—	(29,900)	969,431
1.0.6	Special Projects	1,184,905	—	2,300	913,937
	TOTAL	**$ 7,925,574**	**—**	**0**	**$ 5,367,201**
Vote 2	**Financing of High Technology Projects**				
2.0.1	Alberta LASER Institute	$ 1,000,000	—	—	$ 1,000,000
2.0.2	Alberta Telecommunications Research Centre	631,100	—	—	549,000
2.0.3	Alberta Microelectronic Centre — Microchip Design & Fabrications	2,392,900	—	—	2,392,900
2.0.4	Alberta Microelectronic Centre — Computer Software	9,310,000	—	—	9,310,000
2.0.5	Computer Development	2,600,000	—	—	2,600,000
2.0.6	Light Rail Vehicle Electronics	1,500,000	—	—	1,500,000
2.0.7	Centre for Frontier Engineering Research	376,000	—	—	376,000
2.0.8	Metals and Minerals	400,000	—	(400,000)	—
2.0.9	Satellite Receivers	400,000	—	—	400,000
2.0.10	Laser Technology	—	15,000,000	—	15,000,000
2.0.11	Aircraft Technology	500,000	—	—	—
2.0.12	Computer Systems Development	—	1,234,000	—	1,234,000
2.0.13	Spurt Investment Fund	—	500,000	—	—
2.0.14	Research Park Multi-Tenant Facilities	—	150,000	—	149,561
2.0.15	Computer Security Device	—	—	400,000	398,754
2.0.16	Application of Tomography Technology	—	625,000	—	625,000
	TOTAL	**$19,110,000**	**$17,509,000**	**0**	**$35,535,215**

Investment Development Division

The prime objective of the Investment Development Division is to promote and facilitate investment in Alberta, specifically in the advanced technology sector.

Activities in support of that objective are:

- Developing and reinforcing an awareness in the Canadian and international business communities of the commitment by the Government of Alberta to the research, development and commercialization of developing technologies, and the encouragement of investment of advanced technology industrial development.

- Identifying potential investors, acquainting them with opportunities in Alberta, introducing them to prospective joint venture partners, and facilitating their business introduction in Alberta.

- Liaising with Investment Canada, the Department of Regional Industrial Expansion, other federal government agencies, Alberta Economic Development and Trade, Alberta municipal economic development offices and private sector groups to optimize our efforts for promoting investment.

- Developing strategies and programs to meet our objectives, and systematically assess these activities for their merit.

Highlights

- During 1986, the Department participated in major high technology expositions in Ottawa and Toronto. Coordinated a representative group of Alberta companies, research institutes and municipal economic development authorities to reflect the comprehensive infrastructure and investment opportunities in the province.

- The Department also played a significant role in FIBRESAT '86 - an International Conference on Satellite and Fibre Optic Communications. Alberta Technology, Research and Telecommunications was a major sponsor of the Expo associated event.

- Several other Alberta expositions and conferences were attended by staff officials including Electronics Showcase '86 sponsored by the Electronic Industry Association of Alberta and Marketing Opportunities '86.

- During the fiscal year, visiting missions and individuals from the Federal Republic of Germany, United Kingdom, Israel, Japan, France, Kenya, United Arab Emirates and the United States were hosted and briefed on the investment climate and prospects in Alberta.

- Upon the advice of Departmental sector officers, the branch invited and hosted senior executives from several large international companies in order for them to become more familiar with the Alberta infrastructure and research and development capabilities of our universities, institutes and companies. Work is continuing in identifying specific research projects and joint ventures.

- Representatives of the Department met with targetted companies in California's "Silicon Valley" to invite their interest and attention to Alberta.

Human Resources Division

Human Resources concentrated its efforts in developing systems, policies and procedures for the Department in the areas of staff and organization development, occupational health and safety, classification and compensation, recruitment and selection, employee relations and pay and benefits administration.

Highlights

- Reviewed the requirements of the Occupational Health and Safety Act and introduced a program to ensure that employees have a healthy and safe work environment.
- A Department restricted smoking policy was introduced along with the establishment of a joint worksite committee.
- No lost time injuries or medical aid cases were reported during the year.

Corporate and Public Relations Division

Corporate and Public Relations manages the flow of information concerning the issues and activities relevant to the Department's mandate aimed at a variety of local and international audiences. It designs and delivers promotional materials needed by other sectors of the Department, and coordinates information dissemination on behalf of the Minister and the Department.

Corporate and Public Relations also assists advanced technology "building block" facilities, institutions and organizations to increase the understanding of the Province's science and technology achievements and ambitions.

Highlights

- Developed a 3-year communications and public relations plan.
- Produced a Departmental brochure and other promotional material to outline Department goals, objectives and strategies.
- Assisted the Alberta Research Council, the Alberta Microelectronic Centre, the Electronic Industry Information System and others in official openings and media relations.
- Prepared material for the Minister and Department officials for numerous speaking engagements.
- Coordinated media relations with local, provincial and national media to promote advanced technology industries and companies in Alberta.

Appendix–Alberta Research and Development Milestones

University of Alberta - 1907

Alberta Research Council - 1921

University of Calgary - 1966

University of Lethbridge - 1967

Alberta Oil Sands, Technology and Research Authority - 1975

Alberta Heritage Foundation for Medical Research - 1979

Alberta Environmental Centre - 1981

Alberta Microelectronic Centre - 1982

Centre for Frontier Engineering Research - 1983

Electronics Test Centre - 1984

Alberta Super Computer Project - 1984

Food Processing Development Centre - 1984

Office of Coal Research and Technology, and The Devon Coal Research Centre - 1984

Alberta LASER Institute - 1985

Alberta Telecommunications Research Centre - 1985

Electronic Industry Information System - 1985

Biotechnology Pilot Plant - 1985

Department of Technology, Research and Telecommunications - February 1986